

EXHIBIT 32

US District Court - Delaware
Chapter 11 - W.R. Grace

FINAL - Oct. 23, 2007
William Longo, Ph.D.

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IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE

CHAPTER 11
IN RE: W.R. GRACE & CO., et al.

Debtor,

Case No. 01-1139 (JFK)
Jointly Administered

VIDEOTAPED DEPOSITION OF
William E. Longo, Ph.D.
October 23, 2007
Duluth, Georgia
Lead: Douglas E. Cameron, Esquire
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1 -- depends on who was doing it, because there's a
2 certain amount of water per bag.

3 **Q. And if there was water already in there,**
4 **you wouldn't expect it to be as dusty as what you had**
5 **in your experiment when you just dumped the dry bag**
6 **into the hopper, correct?**

7 A. I would expect it to be the same.

8 **Q. The water would have no impact on**
9 **repressing --**

10 A. None whatsoever, because where the problem
11 is is it's like an elevator shaft or a tunnel. You
12 have an open area and then you have a solid moving
13 into that area displaces the air. So you may have
14 water at the bottom. Really all that does is limit
15 the displacement. So, I wouldn't expect any
16 difference.

17 **Q. And you didn't run a work practice**
18 **simulation with water in the hopper, did you?**

19 A. Absolutely not. It's the only 50-pound
20 bag of Monokote we have. And of course once you add
21 water to it it's no longer in its original form. So
22 if we had multiple bags of Monokote-3, we may
23 consider that, but we don't.

24 **Q. And is it your opinion that all of the**
25 **fibers that we're counting -- or that were counted in**

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1 **the PCM technique were asbestos fibers?**

2 A. Yes.

3 **Q. You didn't do any calculation to determine**
4 **what ratio of those were nonasbestos?**

5 A. Well, we did PCM and TEM. Don't recall
6 finding or remembering back in that analysis that
7 there's any nonasbestos fibers, and I wouldn't expect
8 any.

9 **Q. So your --**

10 A. The only fibrous component in there is
11 asbestos. So, those PCM levels wouldn't be anything
12 else.

13 **Q. Is there gypsum in the bag?**

14 A. There is.

15 **Q. Is there vermiculite in the bag?**

16 A. There is.

17 **Q. And your opinion is that the PCM technique**
18 **only picks up the asbestos fibers, wouldn't pick up**
19 **gypsum, wouldn't pick up vermiculite?**

20 A. Um --

21 **Q. I'm talking PCM, not TEM.**

22 A. PCM, vermiculite is not fibrous. So,
23 yeah, it's going to pick it up. And as you recall,
24 this is an indirect, there is not going to be any
25 gypsum.

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1 **Q. And what method is used?**

2 A. Essentially the wash-out method.

3 Sonification but no ashing.

4 **Q. What's the wash-out method?**

5 A. It's essentially taking the air cassette
6 and cleaning out the inside dust using a mixture
7 of -- well, a hundred percent distilled water and
8 then capturing it into a hundred milliliter specimen
9 jar and then sonicating it.

10 **Q. Can you tell me what the analytical**
11 **protocol is that you followed, you know, obviously it**
12 **wasn't NIOSH 7400, right?**

13 A. It's just the indirect TEM sample
14 preparation protocol.

15 **Q. There's no agency that's put it out, no**
16 **number that it carries?**

17 A. The EPA Level II has that protocol. The
18 ISO has that -- well, not back then because ISO
19 wasn't out. But EPA Level II essentially shows you
20 the indirect protocol.

21 **Q. So you use the EPA Level II protocol to**
22 **analyze these air samples; is that correct?**

23 A. With some modification.

24 **Q. What modifications?**

25 A. We didn't ash the sample and when we

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1 counted the fibers, we only used 5-to-1 aspect ratio
2 and only counted greater than .5.

3 **Q. Greater than .5 in diameter?**

4 A. In length.

5 **Q. Greater than .5 in length?**

6 A. Length.

7 **Q. Okay.**

8 A. All diameters.

9 **Q. By PCM?**

10 A. PCM was 3-to-1, only greater than five and
11 only greater than .25. TEM was 5-to-1, greater than
12 .25.

13 **Q. So the protocol that you're referencing**
14 **that you use, is that a TEM protocol?**

15 A. Well, TEM and PCM. The PCM samples were
16 too overloaded to analyze so we had to do the
17 indirect. The indirect essentially came out of the
18 Level II protocol.

19 **Q. I guess where I'm starting to lose you is**
20 **you didn't do a PCM analysis then because they were**
21 **too overloaded to --**

22 A. We didn't prepare it using the direct
23 method, but we analyzed it by PCM.

24 **Q. And by analyze it by PCM, you used the PCM**
25 **counting rules in terms of what you would count as a**

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1 fiber?

2 A. Correct.

3 Q. And you had indicated that the range that
4 you found would violate OSHA's current PEL and
5 excursion limits, correct?

6 A. Correct.

7 Q. And those are PCM?

8 A. Correct. And that's PCM data there, even
9 though it's indirect.

10 Q. That was my next question. And those
11 current PELs and excursion limits are based on direct
12 preparation, correct?

13 A. Correct. Obviously if that was a direct
14 preparation at 129 to 235, it wouldn't be .1 and 1.
15 That would have been in violation of the '72
16 excursion limit of 10 fibers per cc, and certainly
17 the '72 PEL of 5 fibers per cc based on that.

18 Q. And those, all of those, all of those
19 limits that you gave are based on direct preparation,
20 correct?

21 A. Correct.

22 Q. How does the number that you arrived at by
23 using indirect preparation compare to the OSHA
24 regulations, can you make a comparison?

25 A. Based on all our data we can. If you take

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1 the pulverization data and the dust and debris data,
2 we have both direct and indirect TEM levels in that
3 data. And there's about a factor of ten on the
4 direct versus the indirect on increase.

5 **Q. You mean that the indirect, the fiber**
6 **counts using indirect, are ten times higher than the**
7 **fiber count using direct?**

8 A. On average.

9 **Q. And that's in the pulverization --**

10 A. And the dust and debris. So if you look
11 at that factor you can say okay, well the indirect
12 provides you more precise, better analysis, but
13 what's the factor of increase.

14 And I don't think it's disputed on very
15 heavily loaded samples that you will get an increase,
16 not due to breakup and that sort of stuff, but it's
17 just that it's a more precise analysis.

18 So you have about a factor of ten. At 129
19 to 235, I think, in my opinion, stating that that
20 would violate -- if we had been able to do the
21 direct, if we had lower volumes of air where we could
22 have measured this, that, in my opinion, based on
23 those numbers, they would have violated the 1 fiber
24 per cc excursion limit and the .1 PEL.

25 **Q. Okay. But you -- that's after making a**

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1 **correction to the 129 to 235 fibers per cc, correct?**

2 A. Sure.

3 **Q. And you make that conversion based on this**
4 **10-to-1 ratio?**

5 A. Well, looking at the 10-to-1 ratio, but
6 because we are looking at the same types of material,
7 Monokote-3, and doing the direct versus the indirect
8 on the same set of samples, I think we can make that
9 conversion there because it's approximately the same
10 material, same samples. Some of them done by direct,
11 some of it by indirect. So it allows us to get a
12 qualitative conversion factor for just this material.

13 **Q. And by this material, you're referring**
14 **to --**

15 A. Monokote-3.

16 **Q. Monokote-3. The pulverization and work**
17 **practices demonstration was Monokote-3 after being**
18 **installed, correct?**

19 A. Correct.

20 **Q. And the mixing was Monokote-3 prior to**
21 **being applied, correct?**

22 A. Correct.

23 **Q. It's just dry out of the bag?**

24 A. Correct.

25 **Q. Okay. And you felt comfortable making**

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1 that conversion factor from the pulverization data to
2 the mixing study data, correct?

3 A. Absolutely.

4 Q. And that's because you had both direct and
5 indirect samples taken on that one set of data from
6 the pulverization and dust and debris, correct?

7 A. Correct.

8 Q. So you can make a comparison and,
9 therefore, do a conversion factor?

10 A. Correct.

11 Q. Have you ever conducted a simulation
12 regarding the spraying of Monokote-3?

13 A. No.

14 Q. The data that you rely upon for the
15 spraying of MK-3 is the historical data that we went
16 over earlier today, correct?

17 A. That, and I guess there's --

18 Q. And the references that are in your
19 rebuttal report?

20 A. Correct.

21 Q. Now, your report also references a work
22 practices simulation demonstration at reference 30,
23 and am I correct that that is the work practices
24 demonstration that had a couple of components, one
25 component was pulverizing what you refer to as